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PERA of New Mexico June 30, 2011 Actuarial Valuations

October 27, 2011

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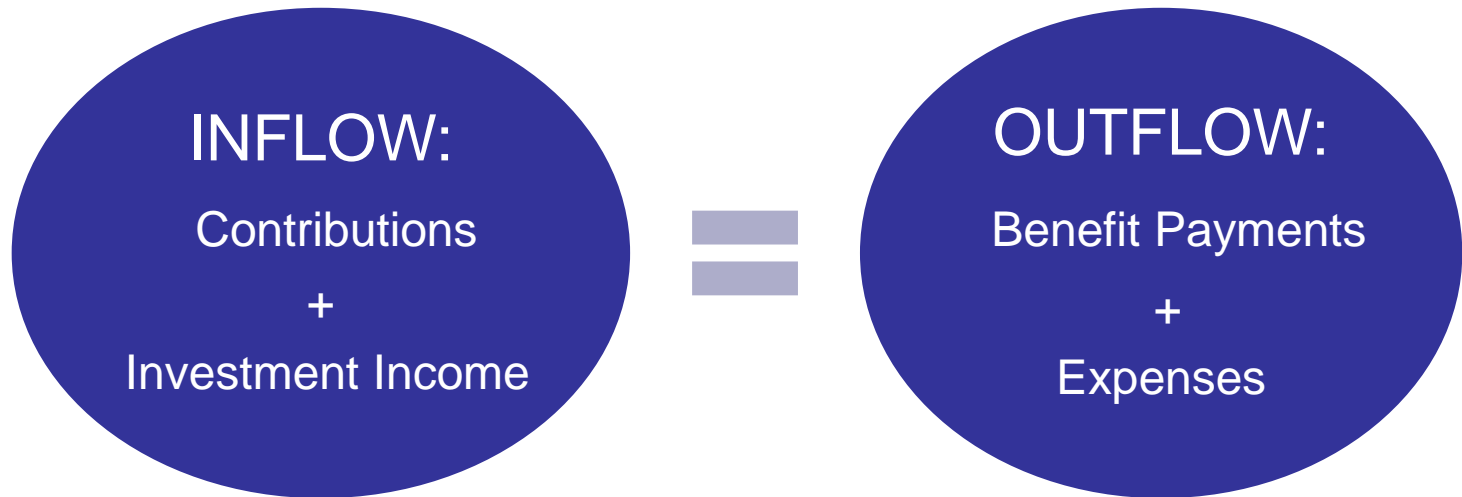


Table of Contents



- Actuarial Valuation Introduction
- General Observations
- Summary of Results
- Considerations

Funding Equation: $C + I = B + E$

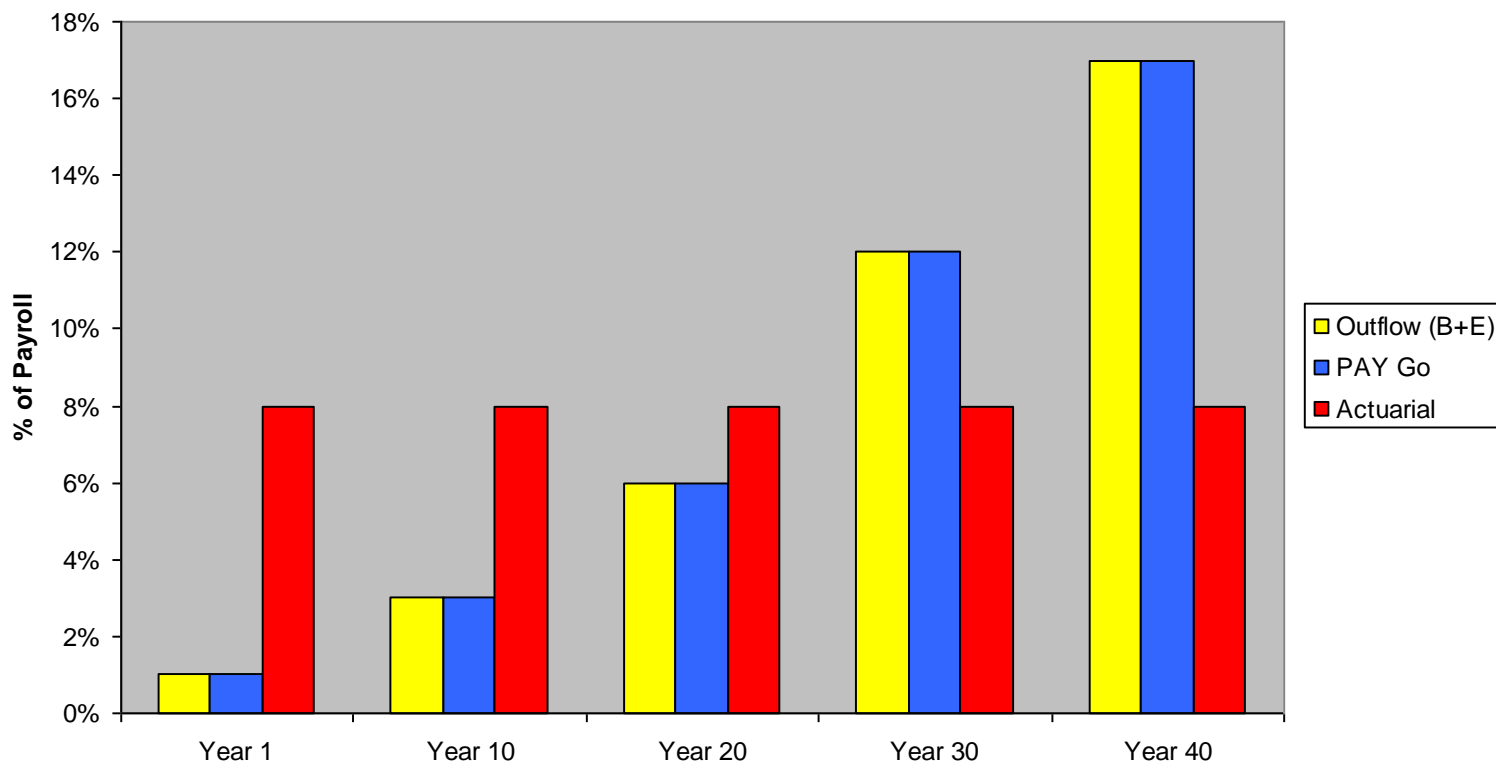


Pay as you go funding accomplishes this in each year

Actuarial funding accomplishes this over the life of the plan

Basic Funding Methods

Pay As You Go vs. Actuarial Funding

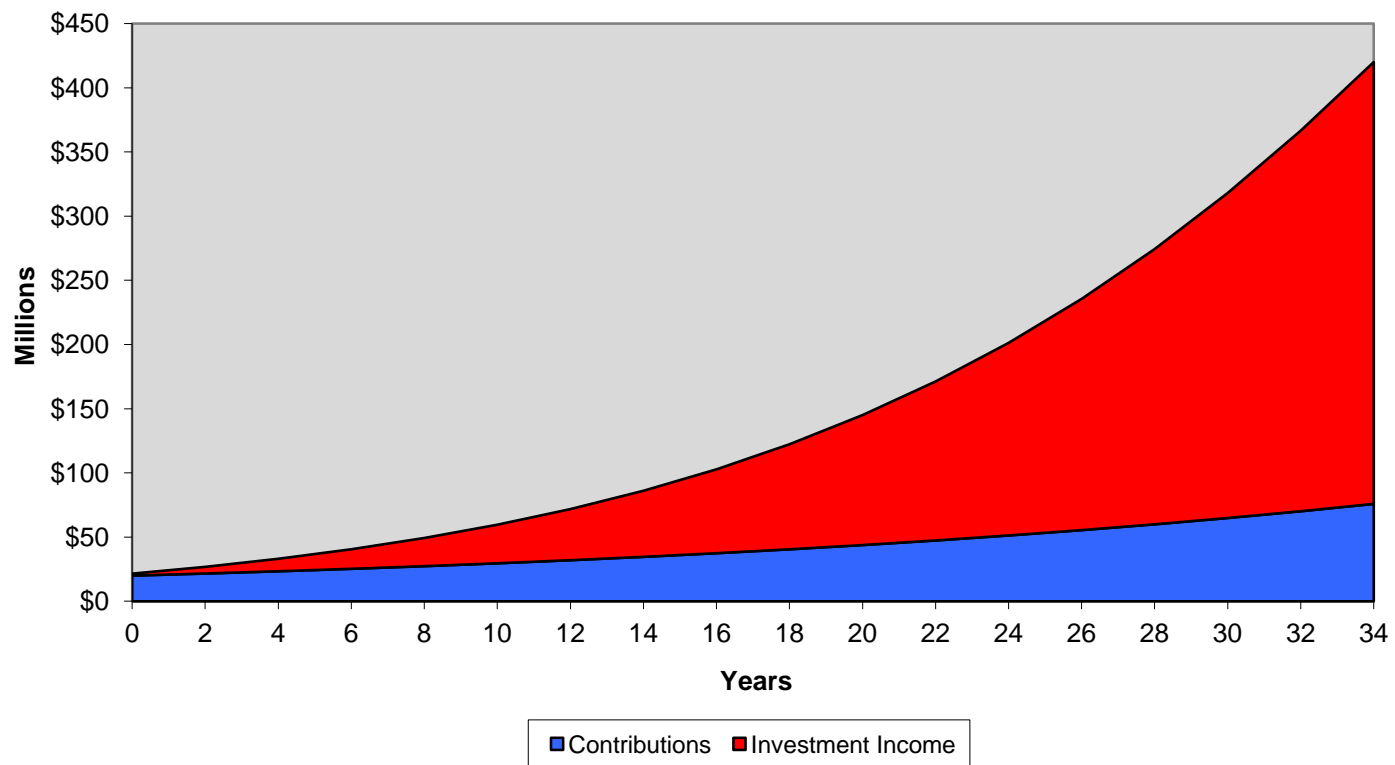


Under actuarial funding excess contributions in early years are invested, and the investment income is used to pay benefits in later years.

Actuarial Funding



Growth of Contributions vs. Investment Income



Actuarial Funding Definitions

Present Value of Benefits

- Value of benefits expected to be paid to all current participants (active and retired)
- Includes past service and expected future service

Actuarial Accrued Liability

- Value of benefits expected to be paid to participants based upon past service
- Includes all benefits for members in pay status
- Includes the portion of active members' benefits allocated to service performed up to the valuation

Actuarial Funding Definitions



Normal Cost

- Present value of active member's benefits allocated to the upcoming year of service
- Sometimes called service cost – the additional cost resulting from an additional year of service

Present Value of Future Normal Costs

- Value of all future annual normal costs
- Value of expected future benefit accruals

Actuarial Cost Method

- A method used to allocate the Present Value of Benefits between past service (Actuarial Accrued Liability) and future service (Present Value of Future Normal Costs)
- Currently PERA uses the Entry Age Normal cost method for all but the Legislative Division
- All cost methods maintain the following relationship:



Actuarial Funding Definitions

Actuarial Value of Assets

- Typically utilizes a smoothing method to dampen the effect that market value fluctuations have on funding requirements

Funded Ratio

- The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability
- Commonly used to monitor the progress toward funding objectives

Unfunded Actuarial Accrued Liability (UAAL)

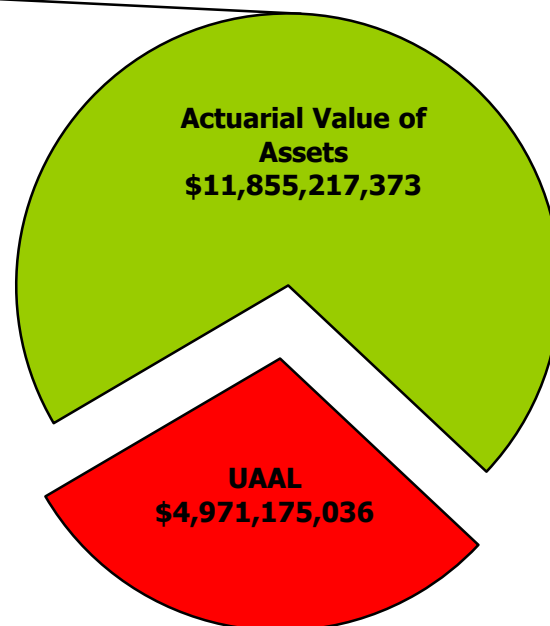
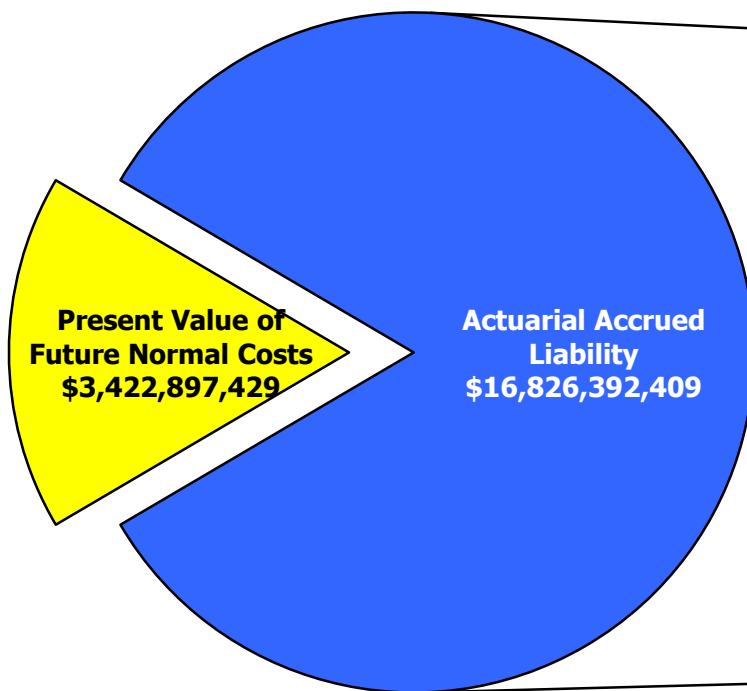
- The difference between the Actuarial Accrued Liability and the Actuarial Value of Assets
- Liability allocated to past service in excess of assets
- Also reflects the cumulative effect of experience gains and losses

Funding Period

- The number of years required to fully amortize the Unfunded Actuarial Accrued Liability

PERA Actuarial Results

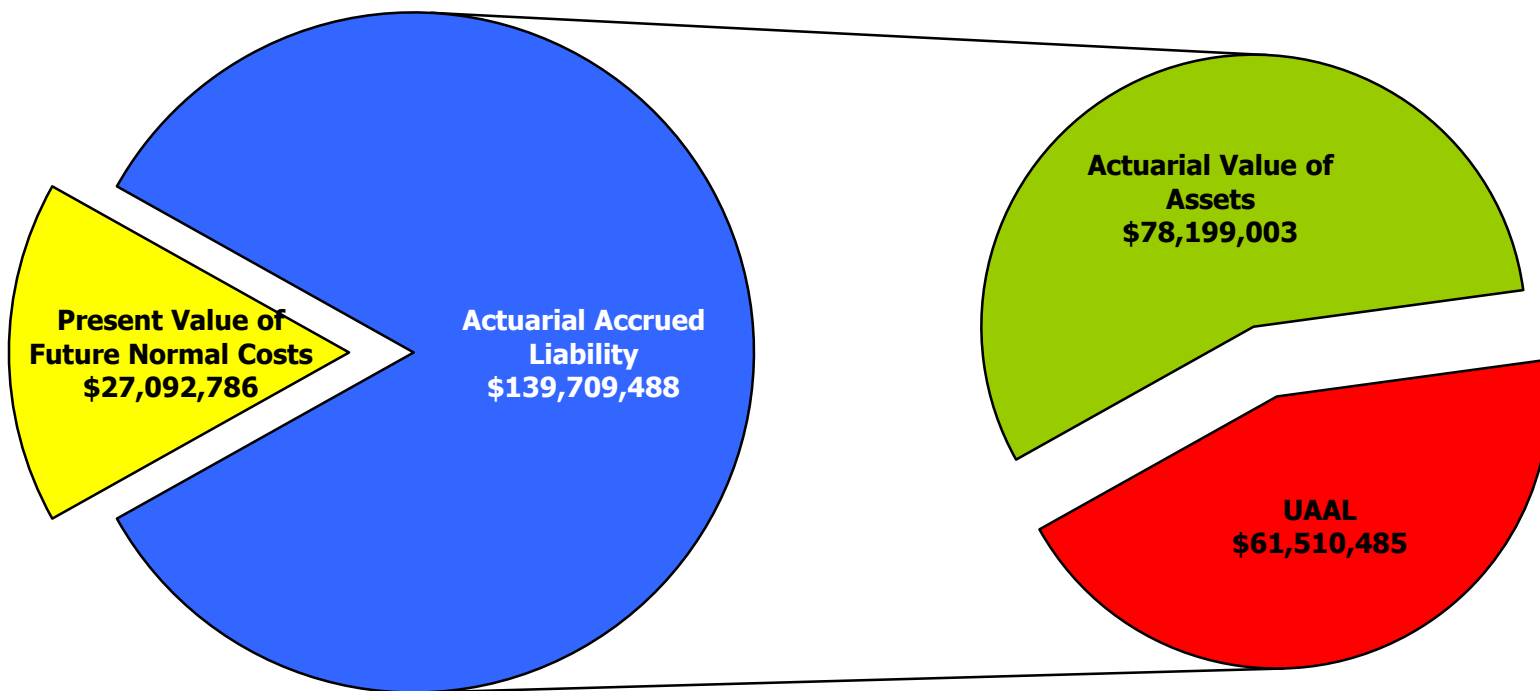
Present Value of Benefits
\$20,249,289,838



2011 Funded Ratio = Assets/Accrued Liability or 70.5%

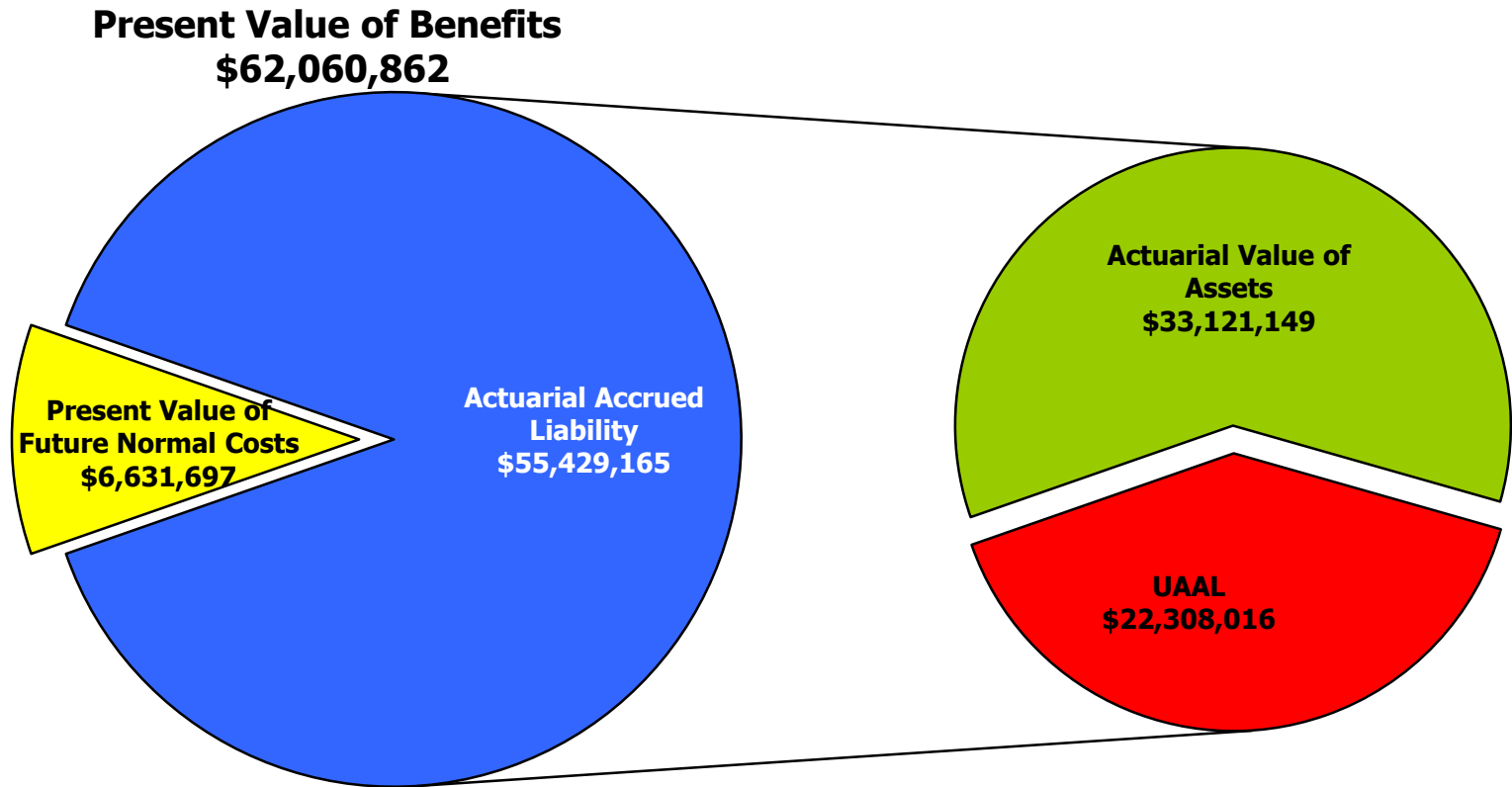
Judges Actuarial Results

Present Value of Benefits
\$166,802,274



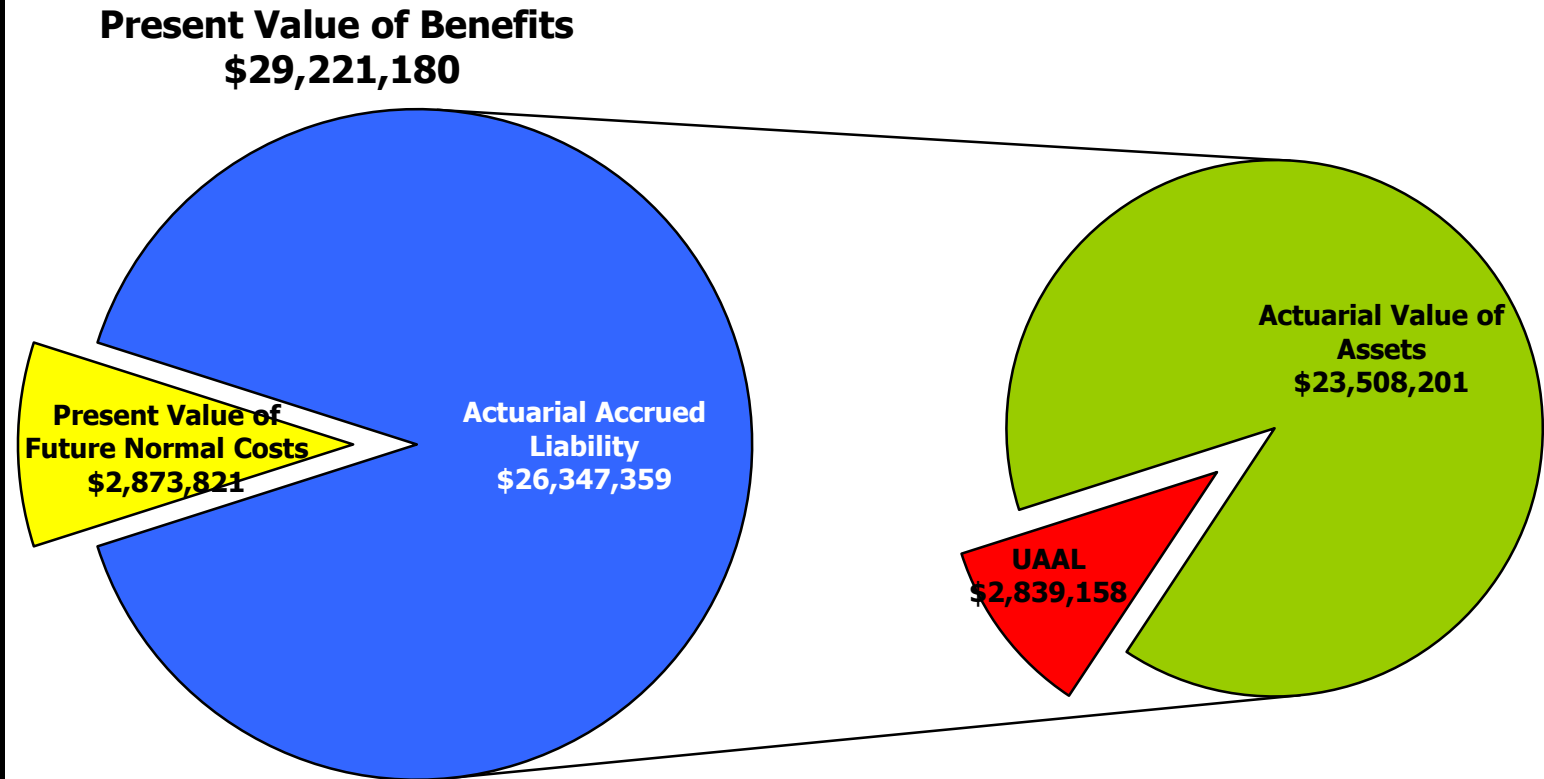
2011 Funded Ratio = Assets/Accrued Liability or 56.0%

Magistrates Actuarial Results



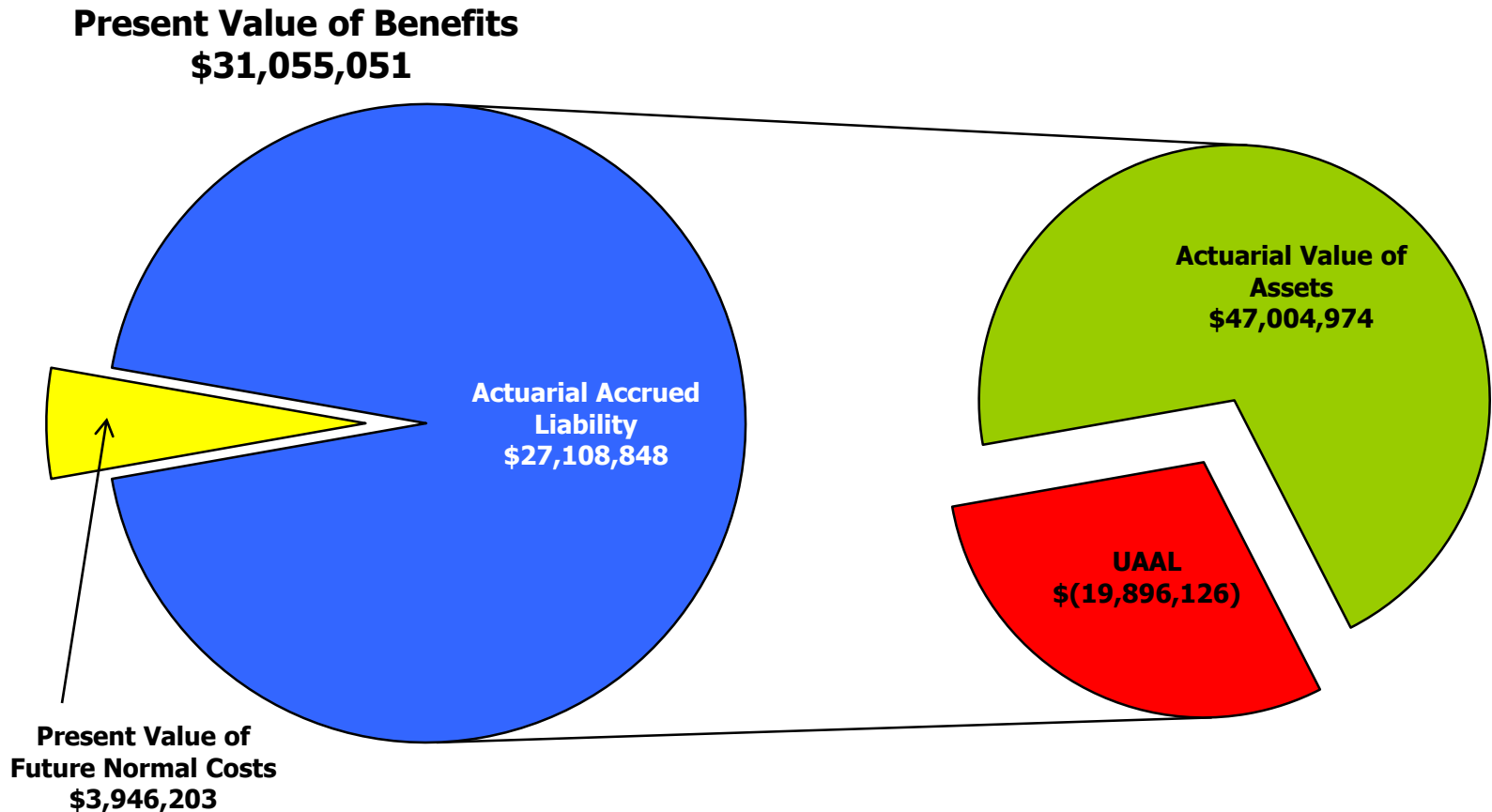
2011 Funded Ratio = Assets/Accrued Liability or 59.8%

Legislative Actuarial Results



2011 Funded Ratio = Assets/Accrued Liability or 89.2%

Vol. Firefighters Actuarial Results



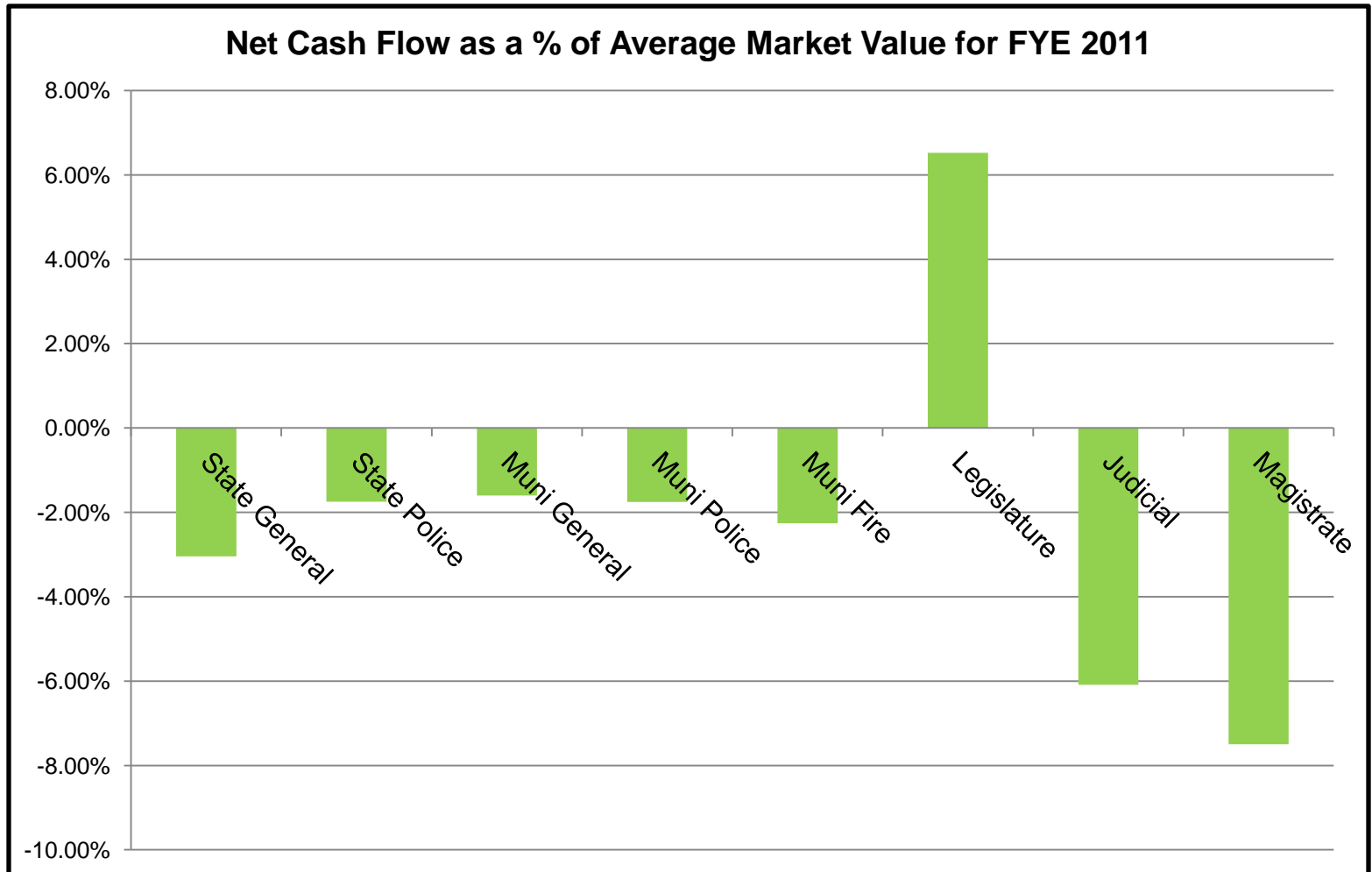
2011 Funded Ratio = Assets/Accrued Liability or 173.39%

General Observations

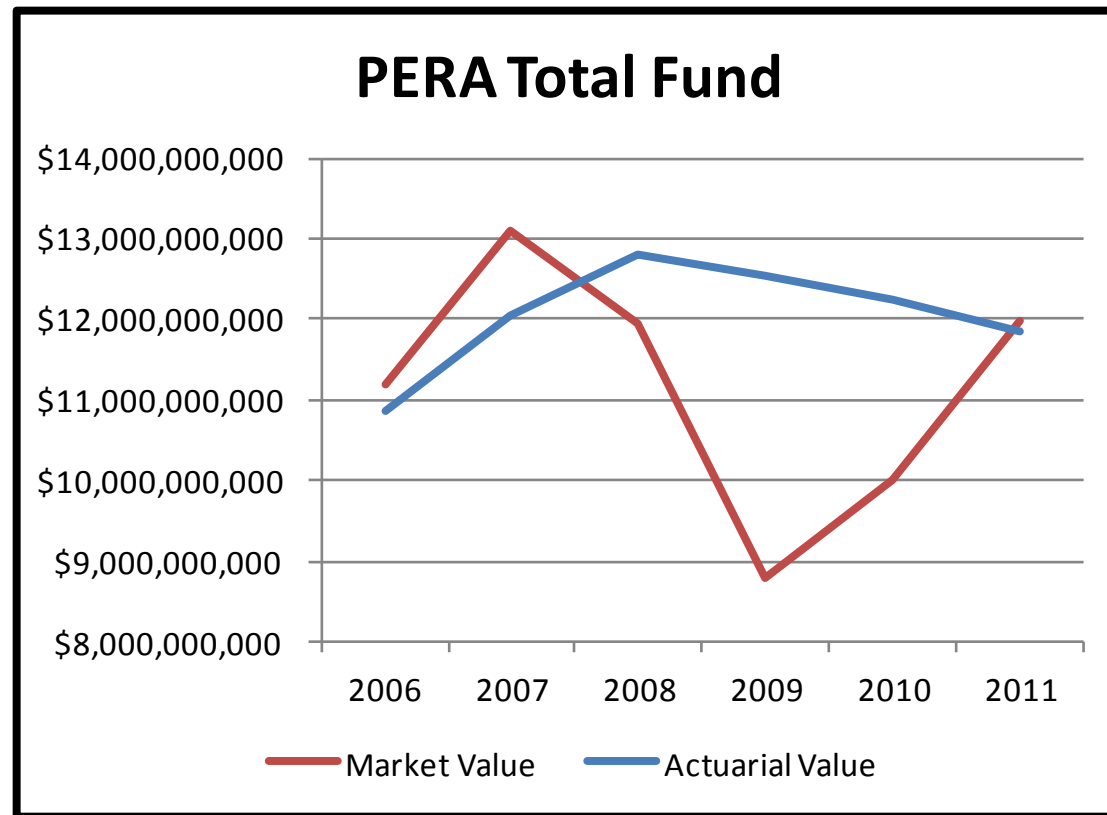


- Actuarial gains due to non-investment experience in general
 - Salary increases commonly less than assumed.
- Market value investment returns of approximately 22.5% for 2011
- Actuarial value of assets is 99% of market value as of June 30, 2011
- Recognition of investment losses from 2008 and 2009 are partially offset by 2010 and 2011 gains
- General decline in funded ratios

2011 Net External Cash Flow



Market and Actuarial Asset Values



Summary of Results – State Divisions



	State Divisions					
	General		Police/Corrections		Legislative	
	2011	2010	2011	2010	2011	2010
Normal Cost	19.26%	19.22%	32.13%	31.26%	\$591,322	\$521,264
UAAL (\$mil)	2,600.1	1,933.6	(14.9)	(105.7)	2.8	4.5
Funding Period (Yrs)	Infinite	Infinite	0	0	30	30
Funded Ratio	65.3%	72.3%	101.8%	113.5%	89.2%	82.9%
Policy Rate	36.12%	30.68%	32.13%	31.26%	\$775,571	\$857,633
Statutory Rate	24.01%	24.01%	32.41%	32.40%		
Rate Shortfall /(Margin)	12.11 %	6.67 %	(0.28)%	(1.14)%		

Summary of Results – Municipal Divisions



	Municipal Divisions					
	General		Police		Fire	
	2011	2010	2011	2010	2011	2010
Normal Cost	17.26%	17.18%	30.95%	30.50%	31.01%	30.68%
UAAL (\$mil)	1,274.8	777.7	620.3	391.5	490.9	360.6
Funding Period (Yrs)	Infinite	44	Infinite	Infinite	Infinite	Infinite
Funded Ratio	75.1%	83.6%	71.1%	80.1%	60.0%	68.0%
Policy Rate	26.45%	22.52%	48.46%	41.30%	55.03%	48.08%
Statutory Rate	21.50%	21.52%	33.87%	33.81%	37.06%	37.04%
Rate Shortfall/(Margin)	4.95 %	1.00 %	14.59 %	7.49 %	17.97 %	11.04 %

Summary of Results – Retirement Funds

	Retirement Funds					
	Judicial		Magistrate		VFF	
	2011	2010	2011	2010	2011	2010
Normal Cost	30.10%	31.92%	31.08%	32.60%	\$891,551	\$1,066,535
UAAL (\$mil)	61.5	50.5	22.3	18.0	(19.9)	(26.9)
Funding Period (Yrs)	Infinite	Infinite	Infinite	Infinite	0	0
Funded Ratio	56.0%	61.2%	59.8%	65.8%	173.4%	231.3%
Policy Rate	56.71%	51.79%	65.85%	58.89%		
Statutory Rate	38.47%	37.84%	34.71%	30.05%		
Rate Shortfall /(Margin)	18.24 %	13.95 %	31.14 %	28.84 %		

Considerations



- Market returns have improved the outlook with most of 2008 and 2009 investment losses either already recognized or offset by gains.
- Without a combination of contribution increases and/or benefit changes most Divisions/Funds will continue to be unable to pay off their Unfunded Actuarial Accrued Liability within the 30-year guideline recommended by GASB.